

require to form galleries undergo the greatest abbreviation of the legs, which must have been influenced especially by the comparative disuse of those organs.

The female of *D. fossor* lives at the extremity of a straight gallery, which it completely fills. Under such conditions its short, strong legs are very useful to it in progressing after the fashion of a mole, by pressing obliquely against the walls of the gallery, so as to push the animal forward. Outside the gallery these legs could be of no use to it. The young females and the males, on the contrary, can move in galleries which are as it were too large for them.

The rectilinear direction and the small size of the galleries is explained by the hardness of the horny substance of the beak in which they are pierced, which causes the animals to confine themselves to a straight passage, having exactly the calibre of their bodies. In the Mammalia, the epidermis of which forms a less resistant tissue, the passages are tortuous, increase gradually in depth, and offer more space to the mites than is afforded to the parasite of the bird's beak.—*Zeitschr. für wissenschaftl. Zoologie*, vol. xxiii. pp. 228–253; *Bibl. Univ.* July 15, 1873, *Bull. Sci.* pp. 244–247.

*Contributions to the Knowledge of the Laboulbeniæ.*

By Dr. J. PEYRITSCH.

The author describes the mode of occurrence and the development of these parasitic fungi. Hitherto only five species of *Laboulbeniæ* were known, three of which were observed on beetles. New species have been detected on Carabidæ, Staphylinidæ, and Dytiscidæ. By their development, and especially the process of fecundation, the *Laboulbeniæ* approach the other Ascomycetes; fecundation takes place by the contact of delicate, filiform organs, pollinodia and trichogyne. The pollinodia are developed at the terminal part of the young plant upon peculiar bearers, the form of which is characteristic of the species; the trichogyne terminates the rudiment of the fruit. In some species the latter is a delicate filament of several joints; but in *Laboulbenia muscæ* it is unicellular; in all species it is thrown off after fecundation. The fruit is only developed after fecundation; it opens by an apical pore and allows the spores to escape. The spores are produced in diverticula of one (or several?) cell in a series of cells, the upper extremity of which previously formed the trichogyne. The form and insertion of the bearer of the pollinodia and its appendicular structures, and the form of the armature of the mouth of the fruit, furnish the most important characters for distinguishing the species of this small group of fungi. Dr. Peyritsch's memoir contains descriptions of all the species, which are referred to five genera.—*Anzeiger der Akad. der Wiss. in Wien*, October 23, 1873.